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TALENT WARS

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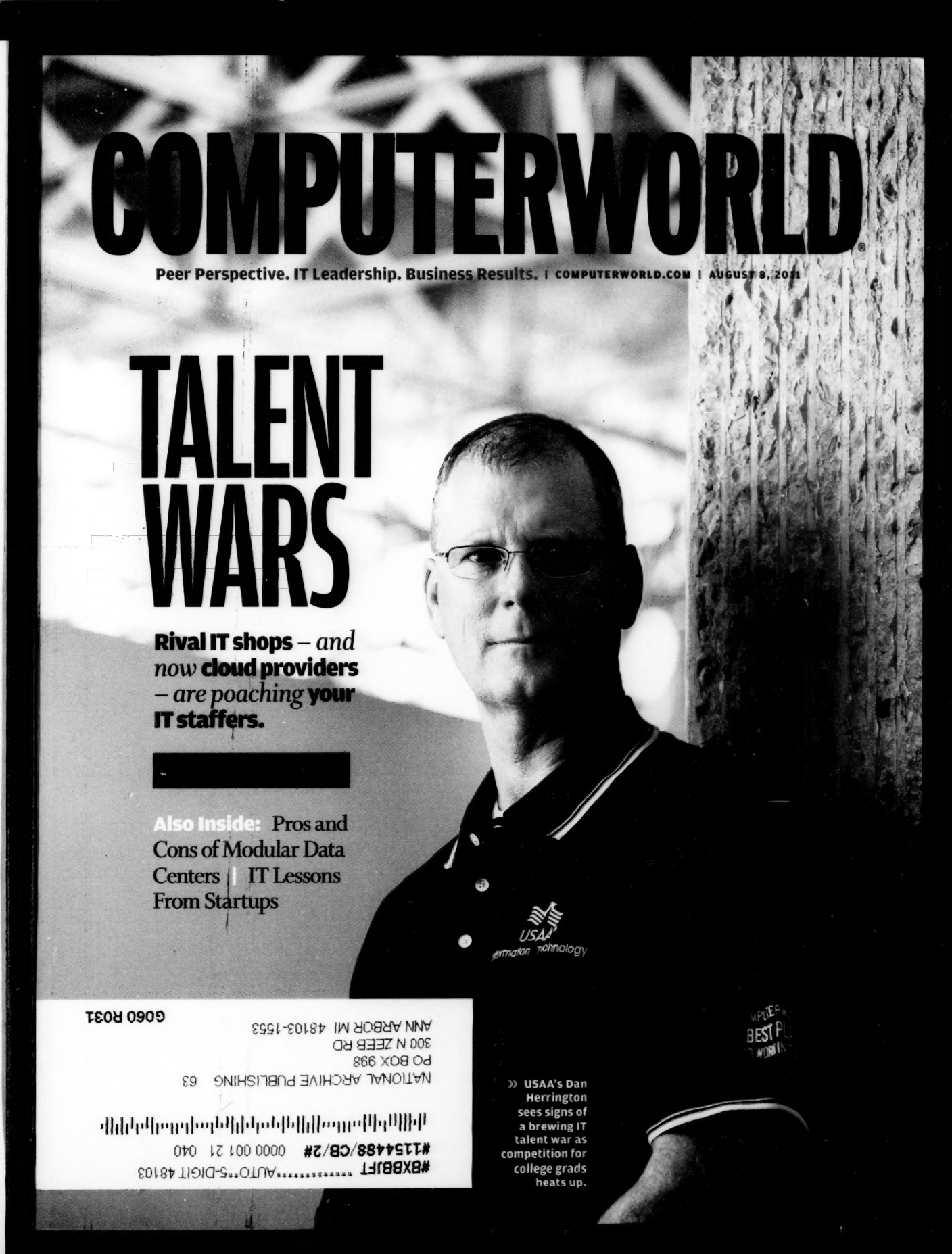

» USAA's Dan Herrington sees signs of a brewing IT talent war as competition for college grads heats up.

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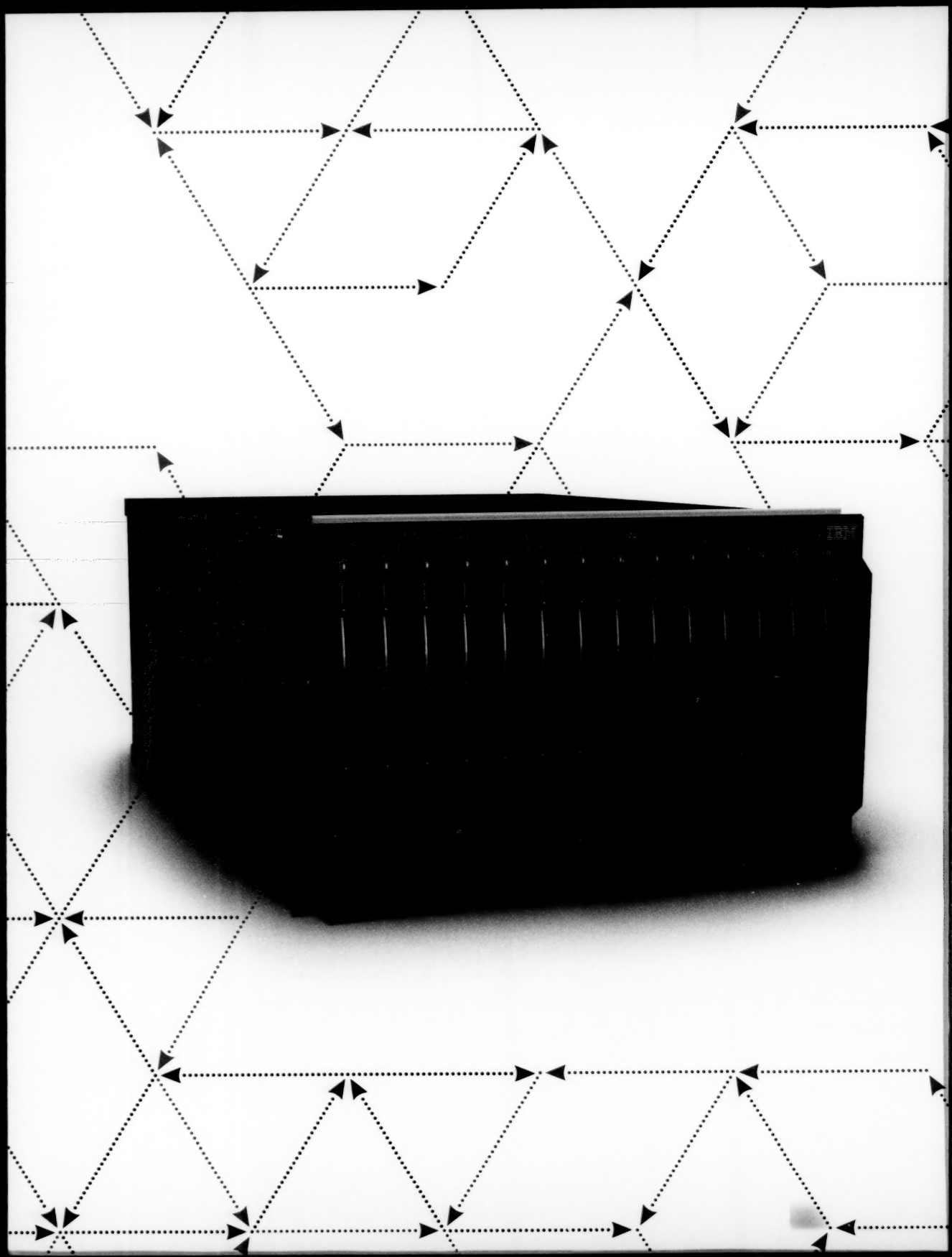
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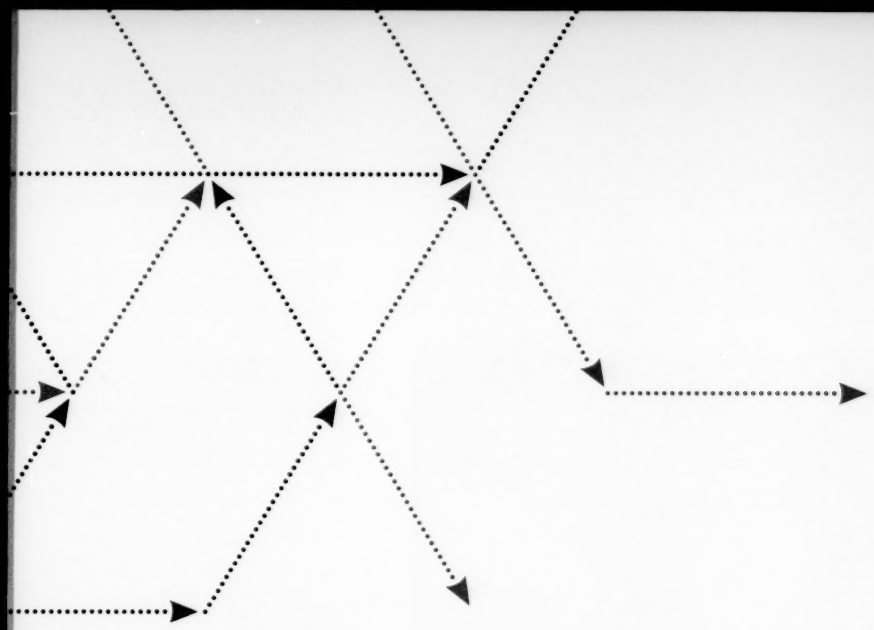

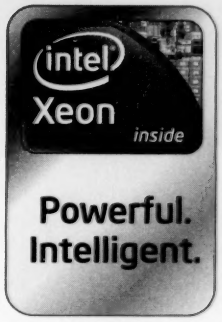

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» Members of the USAA IT team have stepped up their college recruiting efforts after seeing signs that competition for IT talent is getting stronger.

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Talent Wars

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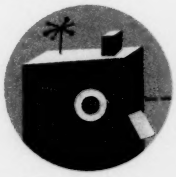

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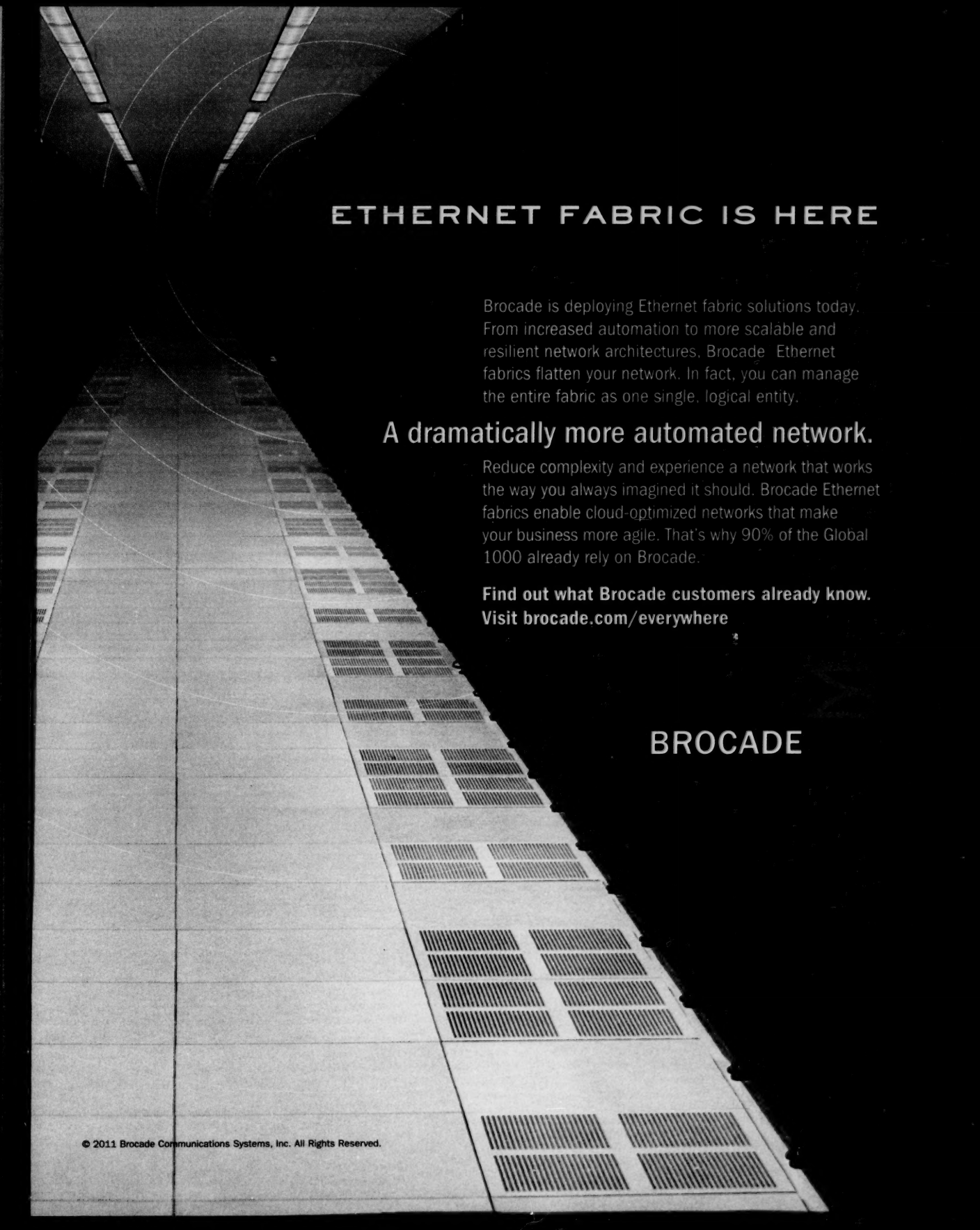
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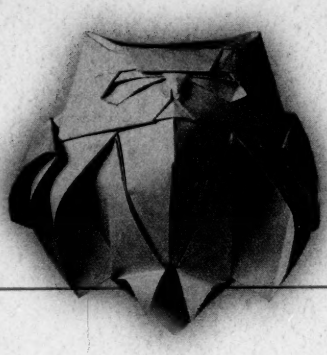

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ONLINE SALES

Shoppers Prefer 'Tablet Commerce'

THE BUZZ about mobile shopping focuses on the smartphone as the device in hand. But Forrester Research analysts suggested in a report last month that retailers should prepare for "tablet commerce," too.

The report, titled "Why Tablet Commerce May Soon Trump Mobile Commerce," is based on a survey of 28,551 online U.S. shoppers that found respondents prefer tablets to smartphones. "This isn't surprising given that tablets address one of the biggest challenges of mobile devices: the small screen," the report said.

Tablets can provide "richer online experiences than smartphones," including horizontal scrolling, page flipping and video viewing, according to Forrester. The "page flippability," for instance, is especially attractive to catalog retailers.

The Forrester survey also found that tablets are primarily used in the home, especially the living room, and support a leisurely shopping experience.

In addition, innovative retailers are likely to use tablets in stores, as kiosk replacements or as tools for improving customer service on the sales floor, the report said.

But the Forrester analysts acknowledged that "tablet commerce isn't a sure bet," because few retailers are spending money to modify their content for tablets.

Plus, the analysts noted, there are still tablet holdouts: consumers who aren't convinced they need to buy another electronic device.

– Mitch Betts

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SAAS

Subway Picks Cloud Software For Usability

Subway, a fast-food franchise operation with 35,000 restaurants worldwide, expected to host a new, mission-critical financial system at its own data centers but ended up doing the opposite.

To help franchises better manage their spending, Subway turned to a system from Coupa Software, a software-as-a-service vendor that is only five years old, is funded by venture capital and hosts its software on Amazon.com's cloud service.

"Because it was SaaS-based, we almost passed on it because we were looking for more of an internal solution," said Carman Wenkoff, deputy CIO of Subway's Independent Purchasing Cooperative (IPC), which negotiates purchasing for Subway franchisees and handles IT.

What changed the IPC's mind was the graphical user interface on Coupa's software, which is expected to be relatively easy to use by franchisees who aren't tech-savvy, said Wenkoff. If the company deployed a system that was difficult to use, he said, franchisee resistance could slow adoption rates.

Subway franchises currently use mostly manual processes to order food, paper goods, uniforms and services from suppliers. The IPC plans to begin rolling out the SaaS offering to restaurants in late October, with full deployment in the U.S. and Canada set for mid-2012.

– PATRICK THIBODEAU

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BETWEEN THE LINES
By John Klossner

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ENTERPRISE SOFTWARE

ERP Users Eye Third-Party Maintenance

A **GROWING NUMBER** of ERP software users are considering a jump to third-party support providers, according to new data from analyst firm Constellation Research.

Over half (57%) of the 244 respondents in a survey conducted in the second quarter indicated interest in third-party support, compared with 42% in a study last year and less than 20% in a 2009 survey, said Constellation Research CEO Ray Wang. He spoke last month during a webcast sponsored by Rimini Street, which offers support for Oracle and SAP applications.

More than 90% of the respondents interested in making the switch cited cost pressures as a reason. Another 80% expressed dissatisfaction with the value they are getting from vendor-provided support.

Vendors such as SAP and Oracle derive a great deal of their revenue and profits from maintenance fees, which customers pay yearly in exchange for technical support and product upgrades. Companies like Rimini Street can't provide the product upgrades, but they claim that they give their customers more effective, hands-on help, as well as the regulatory updates, customization work and tweaks necessary to keep systems running.

Many ERP implementations are 11 or 12 years old now, and they're showing their age, Wang said. "Most of these systems were installed pre-Y2K. We were in a rush, and today we're suffering," he said. Moreover, many companies got a great deal on software licenses at the time, but those systems have turned into expensive shelfware, he added.

Toss in increasing demands from users for consumer-like experiences and tools, and enterprises are feeling serious pressure to do something with their SAP and Oracle backbones, according to Wang.

Money saved by moving to a third-party support provider could free up cash for add-on products, he said.

– Chris Kanaracus, IDG News Service

Micro Burst

Mobile networks in North America are filled to

80%

of capacity, suggesting that wireless carriers need to invest in infrastructure.

HEALTHCARE IT

Consumers Fear Data Loss From EHR Systems

Nearly 80% of U.S. consumers surveyed this year said they're wary of electronic health records because they fear that their personal information might be stolen or lost if it were stored in an EHR system.

The online survey, conducted by Harris Interactive for Xerox in February and released last month, polled 2,720 U.S. adults.

The No. 1 concern: hackers.

"There's a lack of understanding about what EHRs are all about," said Paul Solverson, a partner in Xerox's strategic advisory services unit. "All the stereotypical concerns with ID theft encroach into the healthcare field."

He acknowledged that there is a "track record" of data disclosures in the healthcare industry, but said those are mostly the result of "media at rest being lost" – as in the case of a misplaced laptop or errant file transfer – not hacking.

Solverson said the healthcare industry has done a woefully inadequate job of informing patients about the technology and its benefits, such as the fact that it can actually make patient information more secure.

"If patients had any idea today how accessible paper records are, I think they'd be astonished," he said.

– LUCAS MEARIAN

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Cloud Fears Are Overblown, Says U.S. CIO

Kundra contends that security concerns are exaggerated in part to discourage competition. By Patrick Thibodeau

Many U.S. government websites would be safe on public clouds, says federal CIO Vivek Kundra, shown here speaking at NASA's Ames Research Center in 2009.

NASA / DOMINIC HART

THE U.S. Department of Homeland Security isn't afraid of the public cloud.

Indeed, DHS CIO Richard Spires said the agency is seeking a cloud computing provider to host public websites run by the U.S. Citizenship and Immigration Service and the Federal Emergency Management Agency.

And, he added, the department's use of public cloud technology is likely to grow.

Spires predicted that several other government agencies will turn to the cloud and trust providers to handle more and more sensitive information in the coming years, particularly as the government moves to create a cloud security certification system.

"I am a believer that we are going to, over the next few years, really solve a lot of the cybersecurity concerns that we have with cloud-based services," said Spires.

Federal CIO Vivek Kundra, who has made cloud adoption a priority for federal agencies since his appointment in early 2009, suggested that many of the security fears that have to date discouraged widespread government use of cloud services are exaggerated.

"A lot of people are sort of driving this notion of fear around security," Kundra said during a Washington forum on cloud computing held late last month. "And the reason I think that's been amplified, frankly, is because it preserves the status quo."

Also, Kundra said, "the federal government, for some crazy reasons, has tried to treat every IT system like it is a national security system."

That's not necessary, he said, noting that the Recovery.gov site, which tracks spending of funds allocated under the American Recovery and Reinvestment Act of 2009, is hosted by Amazon.com's EC2 cloud. "That's public data — there's no reason to build a fortress around that and treat it like it's a CIA or NSA system," he said.

As Kundra moves to allay concerns about hosted services, more and more agencies are looking at options for running applications in the cloud.

The U.S. Department of Agriculture, for instance, is weeks away from completing a move of 120,000 users to a Microsoft hosted email and collaboration platform. The USDA had been running 27 separate email systems.

The department estimates that the cloud migration will result in savings of about $6 million per year, according to USDA CIO Chris Smith.

Meanwhile, some vendors are looking to address security concerns by creating government-specific cloud services that meet stringent federal security requirements. These offerings could include physically separate data centers.

Kundra, who is leaving his post this month, said his team has taken a number of steps to increase the cloud options available to agencies. For example, they set up the Apps.gov portal.

Created in 2009, Apps.gov provides agency IT departments with information on cloud technologies and vendors that have been approved by the General Services Administration.

One of the advantages of the site is that it gives "a small startup the same chance to engage with the federal government that a tech titan has," said Kundra, who explained that government contracts have traditionally been won by vendors who understand the procurement process "better than the technology they are deploying." That situation, he said, has led to the rise of something akin to an "IT cartel" in the federal government.

Executives from venture-backed firms are now presenting their wares and services to government CIOs, Kundra reported.

Kundra and Sen. Tom Carper (D-Del.) organized the forum, which was attended by the CIOs of several government agencies. ◆

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Drug Maker Fixes Supply Chain With Social Tools

Ratiopharm Canada and its new parent company see improvements in service levels and manufacturing cycle times. By Sharon Gaudin

A FEW YEARS AGO, IT officials at pharmaceutical company Ratiopharm Canada turned to collaboration and Web 2.0 tools in an effort to fix a supply chain that was in constant crisis mode.

The company had been finding it increasingly difficult to react to changes in demand for its generic drugs. At times, the company's supply chain unit could be unaware for up to four months that manufacturing snafus or quality control issues were causing slowdowns.

IT officials at Ratiopharm, which was acquired by rival Teva Pharmaceutical Industries for $2.5 billion last year, determined at the time that better internal communication could solve at least some of the problems, said Antonio Martins, who was then Ratiopharm's vice president of supply chain.

The company decided to use Web 2.0 and social collaboration tools to help employees share information more efficiently. It initially used Microsoft's SharePoint, and later turned to collaboration tools from Strategy-Nets and then software from enterprise social networking firm Moxie Software.

The strategy worked, not only fixing the supply-chain problems but also improving service levels and, according to Martins, saving jobs during the recession.

The supply chain team is now using social tools and the expertise it has acquired over the past several years to similarly improve processes at Teva Canada, said Martins, now Teva Canada's vice president of supply chain.

Prior to the Ratiopharm acquisition, Teva Canada was struggling through industry upheaval caused by the recession. Its service level — the percentage of orders filled on time — was below 90%, and its manufacturing cycle was around 80 days, Martins said. After Teva Canada started using Ratiopharm's tools earlier this year, its service level rose to over 95% and its manufacturing cycle time — the period from order to sale — improved to 35 to 40 days. The company expects the cycle time to drop to 25 days by the end of the summer.

Ratiopharm had experienced similar results. Before it started to use collaboration software, its service level was around 82% to 85%, which Martins described as "terrible."

"When you're talking about medication, it can be very serious," he said. "We raised service levels in the first six months to around 95%. When you go from 10% shortages to 5%, you have half the shortages. The stress in the supply chain and the company is cut substantially."

Martins said Teva Canada now hopes to improve its service level to a consistent 98%.

Dan Olds, an analyst at Gabriel Consulting Group, said Ratiopharm and Teva Canada were smart to turn to social tools.

"It's easier to get people to chime in on something like a collaboration tool," said Olds. "It's harder to get them to attend and participate in meetings." ◆

It's easier to get people to chime in on something like a collaboration tool. It's harder to get them to attend and participate in meetings.

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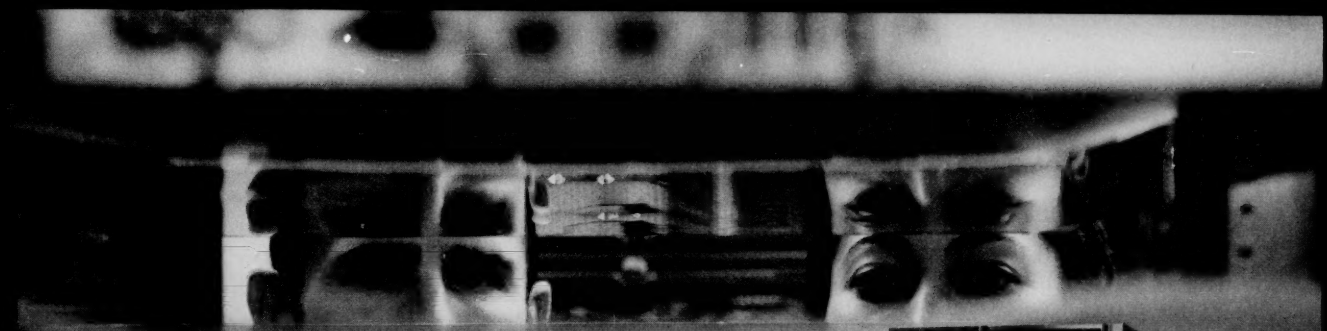

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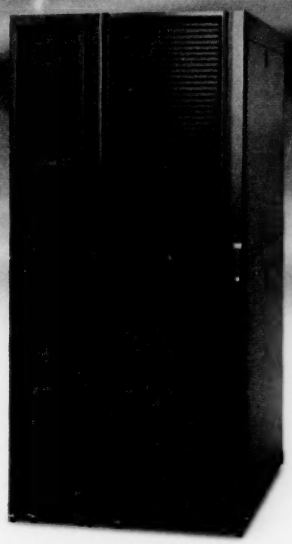

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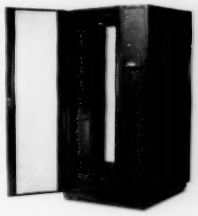

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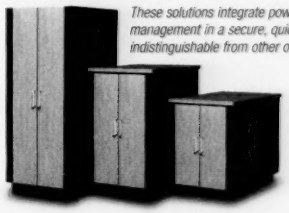

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THE Grill

Barbara Koster

The Prudential CIO isn't waiting for the talent to come to her; she's planting seeds.

What is your favorite technology and why? I'm in love with my iPad, so I'd have to say mobile. The iPad, and now all the tablets, have revolutionized our ability to blend our work and home balance. That machine comes with me everywhere.

In high school, I was ... nerdy and shy. To which everyone would now say: "There's no way you were shy."

What is the most interesting thing people don't know about you? I was the first woman in New York City to be allowed to be on the intercollegiate bowling congress. I was the only woman with 120 men. The reason they allowed it was because my average was 192. It changed things.

BARBARA KOSTER, *CIO of Prudential Financial, oversees 1,700 IT employees and formulates policies, establishes standards and architectures, and develops guidelines and management practices for the financial services giant. She also manages the company's global networks and data centers and other technology infrastructure. In a market where the amount of talent is diminishing due to a lack of interest in IT careers, Koster and Prudential have embarked on several initiatives to reach out to the military, universities, high schools and youth organizations to help promote IT jobs.*

How do you find IT talent in today's market? The pipeline of talent is actually diminishing from a college entry [applicant] point of view. We have fewer and fewer of our young adults going into technology. So we've spent a lot of time creating a lot of pipelines. For example, we have a program with Columbia University that takes high school graduates

Continued on page 16

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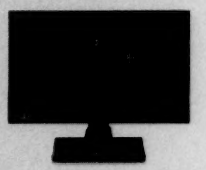

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Continued from page 14

from Harlem and Newark — those who have a good propensity for math — and put them through a training program to teach them the technologies we at Prudential find we're in need of.

We've also expanded that program to work with [military] veterans. We're graduating our first class [this summer]. That's a class of 25 veterans who were selected because they either had skills from the military or have a propensity for technology. It's a hybrid program. It's education and internships.

> **I think we, as a community, did ourselves a disservice** when we allowed everyone to believe that all technology jobs were going offshore.

Why are fewer people getting into technology careers? I think we, as a community, did ourselves a disservice when we allowed everyone to believe that all technology jobs were going offshore. Coding clearly went offshore, but there are at least 100 different types of technology jobs, whether it's business analysis or quality assurance testing. All [of] that has to be done where the work is being done. When you talk to the kids, they tell you the jobs are being offshored. I think it's a re-education process we have to go through about how exciting technology can be.

How do you keep your employees happy? I think it's a function of communication. We spend a lot of time talking with our folks. We have town halls, which can be up to 200 or 300 people attending online and in person. We do small lunch gatherings, where senior executives talk about business strategies, or invite a guest speaker in to discuss a new technology that's arriving and how Prudential might implement it. Then we test it through an employee opinion survey to make sure we're getting to the employees what they want to know and hear about.

Do you also offer IT job cross-training? Yes. [Employees] all do attend training throughout the year. Some of it is online, so they can do it when it's the best time for them. We have a broad remote-access program. It's hard to teach them new technology if they can't try it out, so we also offer a lot of pilot programs. We also have swap programs where people will change jobs for six months and try each other's jobs out, but they have to be similar.

You've done a number of acquisitions over the past few years. Do you tend to take best-of-breed IT out of those companies, or do you standardize on your own? Our infrastructure has grown tremendously. The acquisition strategy we have has caused us to grow the infrastructure. We will take best of breed. We find that's the easiest way to integrate and convert. Then, over time, we'll look at what the new technologies are that are evolving that can help us to be more efficient and effective.

What do you consider the greatest challenge in IT today? It's what we don't know about security. Like all our peers, we participate with the FBI and Department of Homeland Security, but there's still so much that happens that we don't know. You just have to look at the current examples of Sony and RSA breaches, and WikiLeaks. Those are things happening every day, and our ability to stay on top of that is very critical.

How have you embraced personal technologies like iPhones and tablets? We are hoping to have an environment that will allow our employees to choose whatever they'd like to use. Today, we're already allowing iPads, iPhones, Androids, MacBooks; we have an open infrastructure. We have a virtualized environment, so their individual desktop is sitting inside the data center and then there's a portal for access to that [device].

Have you implemented a private, public or hybrid cloud model? Yes, to all three. Our private cloud is called our utility computing platform, where we share environments for some things. For example, our grid computing is a shared environment, and the businesses buy their services and pay for what they use. We consider that our private cloud. As far as public cloud, we are out there with Salesforce.com. It's a very good service. It started in two of our smaller businesses, and now all of our big businesses are using it as well.

What have you found to be the greatest benefit of using the cloud? Clearly, price-performance. You can't beat it. You put the volume together and it drives down cost. Also, for Salesforce, it was great to be able to move into a new service that we didn't have to build the infrastructure for. So it was a very quick time to enter.

– *Interview by* **Lucas Mearian**

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OPINION

PRESTON GRALLA

What Place Does Ethics Have in the Tech Industry?

Is Google's 'don't be evil' ethos the proper response to China, or is Microsoft correct that shareholder value trumps all?

MICROSOFT'S PENDING deal to have Bing power English-language search for the Chinese search engine Baidu puts Microsoft in a cozy relationship with Chinese government censors. Is this simply the right thing to do for stockholders, or an immoral commercial arrangement that violates universal human rights? How you feel about that question goes to the core of whether you believe ethics have any place in the tech industry.

First, a bit of background. Bing will handle all English-language search for Baidu, which has 80% of the search engine market in China. The deal will help both companies: Microsoft will get a foothold in the massive Chinese search market, and Baidu is expected to increase its market share even further.

Both Baidu and Bing have agreed to censor search results on a wide variety of topics, including human rights, dissidents and Taiwan.

This opening for Microsoft arose only because last year Google refused to continue cooperating with Chinese government censors. Since then, Google search has lost significant market share in China, and even Gmail has been hard to access. Google blames the Chinese government for that.

The two companies' explanations of their actions say a great deal about how they approach the ethical quandaries that any global tech company faces. Last year, David Drummond, senior vice president of corporate development and chief legal officer for Google, explained the company's decisions on a company blog: "We have decided we are no longer willing to continue censoring our results on Google.cn." He followed up in a later post, "We want as many people in the world as possible to have access to our services, including users in mainland China, yet the Chinese government has been crystal clear throughout our discussions that self-censorship is a non-negotiable legal requirement." Google, he said, would not agree to that censorship.

Microsoft's public message regarding its decision to work with Baidu and continue censorship could not be more different. A Microsoft spokeswoman told *The New York Times*, "Microsoft respects and follows laws and regulations in every country where we run business. We operate in China in a manner that both respects local authority and culture and makes clear that we have differences of opinion with official content management policies."

But Microsoft has taken no action on that difference of opinion.

So, who's right? Is Google's "don't be evil" ethos the proper response, or is Microsoft correct that increasing shareholder value trumps all else?

I think Microsoft is wrong. It would remain an immensely powerful and profitable company even if it didn't cooperate with censors. And morality transcends the profit motive. Helping the authoritarian Chinese government stay in power, and keeping many millions of Chinese people in the dark about human rights, political freedom and dissidents, is simply wrong. Just because there's money to be made doing the wrong thing doesn't mean you should do it.

Google was right to refuse to censor search results. It has shown that you can do the right thing and still be profitable. In fact, doing the right thing may well ultimately contribute to the bottom line. Creative engineers are more likely to be drawn to a company with a strong sense of ethics than they are to a company with a "do whatever it takes" attitude. And having a more experienced, creative staff in the tech world generally leads to higher profits. ◆

Preston Gralla is a *Computerworld.com* contributing editor and the author of more than 35 books, including *How the Internet Works* (Que, 2006).

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» USAA's DAN HERRINGTON (third from the left) is seeing signs of a brewing IT talent war as competition for college grads heats up. He's joined here by IT director Brian Parks, and Ashley Petro and Saralyn Morris from USAA's recruiting program.

REID HORN

TALENT WARS

Competitors – and now cloud providers — are poaching your best IT staffers and job candidates. BY JULIA KING

DAN HERRINGTON says his first inkling of a brewing IT talent war came early this spring, when he noticed that "college kids weren't accepting our offers on the spot."

This was a first for Herrington, who is executive sponsor of college recruiting for IT at USAA, a San Antonio-based Fortune 200 insurer and financial services company that has been No. 1 on *Computerworld*'s Best Places to Work in IT list for two years in a row.

Herrington adds that another disturbing new trend is a "marked increase" in the number of college hires who accept job offers but then later change their minds. "We've seen college students reneging on internships as well," he notes.

USAA has responded by expanding its out-of-state college recruiting efforts and stepping up communication with interns between the time they accept an internship and their first scheduled day on the job. So far, the approach appears to be working, as evidenced by nearly 200 college hires — both full-time employees and interns — in 2011.

In Melbourne, Fla., Vinay Patel, senior software engineering manager at Harris Corp., has been seeking experienced software developers for three or four months. So far, only two applicants have passed both telephone and in-person interviews. Both were offered employment, but one turned down Patel's offer and the other accepted but subsequently reneged a week before he was due to start. Apparently, he received a better offer, Patel says. "The job seekers seem to be in the driver's seat right now," he notes.

A quick scan of numbers from the U.S. Bureau of Labor Statistics confirms this about-face in the IT job market. In May, it pegged the IT unemployment rate at 3.8%, significantly lower than the national average unemployment rate of 9.1%. At the same time, 65% of 900 hiring managers surveyed by Dice.com said they expect to hire even more tech professionals in the second half of this year than they did during the first six months of 2011. "The growth has reached a level where positions are staying open for months due to a shortage of qualified technology professionals," according to the Dice report, which went on to suggest that now may be a great time for IT job candidates to ask for more money than they're offered initially.

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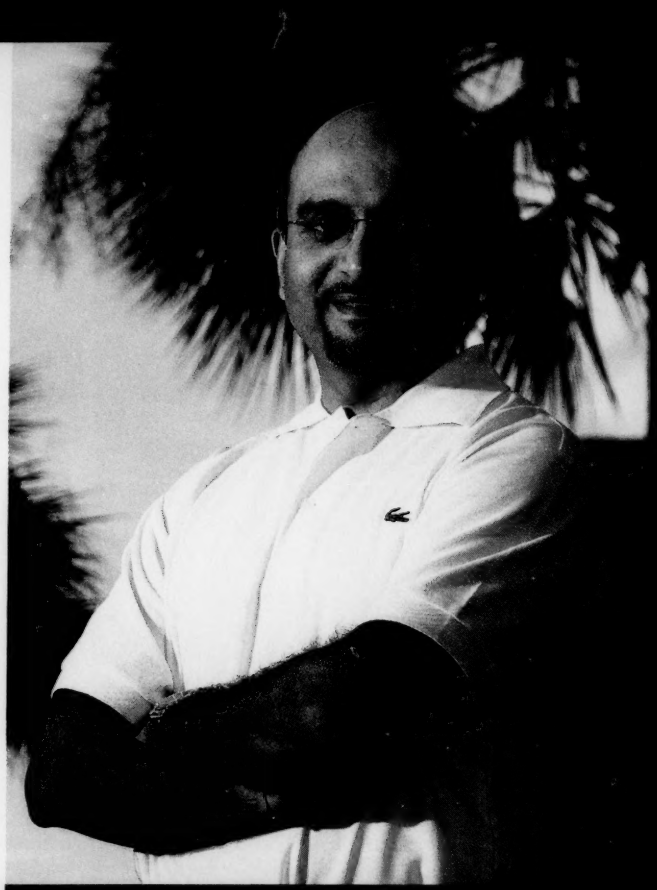

» "The job seekers seem to be in the driver's seat right now," says Harris Corp.'s VINAY PATEL.

BUILDING BENCH STRENGTH

LONG-TERM IT workforce planning and job rotations are two of the best weapons in the war for IT talent, say many CIOs.

After conducting a demographic study and realizing that 35% of the IT workforce at Guardian Life Insurance was eligible for retirement in the next decade, CIO Frank Wander and his team got cracking on the company's new Talent 2020 program. Among other things, the program analyzes the skills of all IT employees and then pairs newer employees with veterans to facilitate knowledge transfer.

At Medtronic, CIO Mike Hedges has established an IT Talent Council, which is headed on a rotating basis by IT vice presidents from Medtronic's various business units.

"The council consists of directors and senior managers who look at talent across the organization and come up with new ways to attract and retain," Hedges says. One of the programs involves moving 30 to 40 managers from the business units to the company's shared services unit "to make sure that people are not getting stuck in a rut," he says.

Hedges also has identified the company's top IT talent, which he defines as "people we'd have a significant challenge replacing because of their interpersonal, leadership and planning skills."

Hedges meets with at least five of these employees monthly and has them all meet regularly, sometimes for dinner, as a way to practice their interpersonal skills and forge closer relationships.

"It's the softer skills — like teamwork and communication, problem-solving and analytical skills — that we'd find harder to source," he notes.

Harris Corp. rotates employees through various departments and roles so they can gain broad first-hand knowledge about the company's lines of business across its commercial and defense units. The idea is to give employees a chance to see opportunities for growth and what kinds of work might most appeal to them.

"I want to make sure I can provide an environment where employees feel they can grow their skill sets and professional characteristics and be in an engaged learning environment," says Vinay Patel, senior software engineering manager at Harris. "We constantly push people to different roles and give them different projects. I can't think of a single person on my team who has been in the same role for more than two to three years." — JULIA KING

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"Technology professionals are the basis for innovation, efficiency and creating an agile workplace," says Tom Silver, senior vice president of Dice.com. "Now is the time to ask for more money. Negotiate hard at the outset of a new job, because that initial salary may set the base for the next three years."

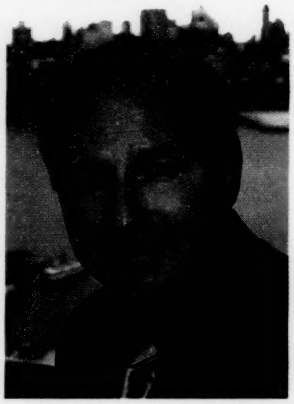
A surge in corporate use of social media, mobile tools and cloud technologies, coupled with loosening IT purse strings and pent-up demand for IT-based business projects, are all big factors driving the escalation in need for IT talent — and the related escalation in competition for that talent. The shrinking size of the pool of qualified college graduates and the ever-expanding surge of baby boomer retirements are also key contributors.

Earlier this year, 48% of CIOs said it is very or somewhat challenging to find the skilled IT professionals they need, according to the Robert Half Technology IT Hiring Index and Skills Report.

"The reality is that as technology pervades every aspect of personal and professional life, the need for technical talent is huge," says Shawn Banerji, managing director of IT recruiting company Russell Reynolds in New York. "People on the service provider side are looking to hire, and traditional corporate IT departments are also looking to hire. There is absolutely a war for talent."

"Almost half [of our] IT workforce will be eligible for retirement in 10 years. It's staggering.

FRANK WANDER, CIO, GUARDIAN LIFE INSURANCE



Wanted: Deep Experience

But it's not just any IT professionals they're after. What most companies want are IT people with experience in newer technologies they're looking to deploy or those with very deep technology and business experience in a particular industry. Experience with developing mobile and social media applications, using newer programming languages like Ruby, and deep integration skills for linking on-premises computing systems to cloud-based services are at the top of recruiters' wish lists.

Harris' Patel, for example, says the application development openings he has are for highly experienced professionals. "For these positions, which are for new projects, we need people with five to 10 years' experience. They are not positions for new graduates," he says. "It has been very difficult to fill them."

Guardian Life Insurance in New York recently conducted an IT workforce assessment and found that 35% of its IT staffers are over 55 years old. "Almost half [of our] IT workforce will be eligible for retirement in 10 years," says CIO Frank Wander. "It's staggering. These are our most experienced people."

What Guardian is looking for, he says, are young IT professionals to whom extremely high-value senior IT employees can pass on their experience and knowledge about Guardian's business and processes (see sidebar). On the technology front, Guardian — like just about every other company that's hiring for IT — needs professionals with data modeling and design skills and mobile application skills. The insurer is also seeking IT workers with data center consolidation experience.

"Fifty percent of Fortune 500 companies will be modernizing their data centers over the next five years. The reason is that devices are becoming more powerful. They take up less space and need less electricity," Wander notes. "We're doing a data center modernization and consolidation initiative, and we want people who have been through this. It's very hard to get. It's one of the hottest areas."

Also high on corporate IT recruiting wish lists are any and all skills having to do with cloud and software-as-a-service (SaaS) technologies, as well as the business process and technology integration know-how needed to link these newer technologies to legacy computing environments.

Recruiting experts say this particular need is both a blessing and a curse for corporate IT departments. On one hand, IT professionals want to work with these newer technologies, so in-house cloud and SaaS projects can help corporate IT departments attract and retain the best and brightest.

At Purdue Pharma, a privately held pharmaceutical company in Stamford, Conn., CIO Larry Pickett says a modern IT infrastructure that includes cloud technology is a big reason the company is able to retain its most talented IT employees. "We're right in the middle of implementing state-of-the-art technology and doing things that are innovative and building [IT employees'] skills, so it increases retention," Pickett says. "We are implementing a private cloud infrastructure across two data centers, so there's an opportunity to learn those skills without leaving Purdue."

Competing With Vendors

On the other hand, corporate IT's need for IT professionals with cloud, SaaS and integration skills pits corporate IT directly against technology companies themselves in the escalating war for talent.

"Vendors look at people who have worked at [user companies] as bringing institutional and cultural knowledge with them and a hands-on knowledge of workflows," says Russell Reynolds' Banerji. This makes corporate IT employees prime poaching targets for technology vendors.

What puts IT shops in an especially tough position, experts say, is that job seekers typically view technology vendor companies as more innovative and better able to offer opportunities for growth.

"If you think of corporate IT budgets and the way they spend, 80% is usually going to maintenance of old stuff and maybe 20% goes to innovation," notes Woodson Martin, a senior vice president who heads recruiting at Salesforce.com. IT professionals "want to work on cloud and languages like Ruby. They want to work on the future, not the past, but the fundamental mechanics of that 80/20 means it's hard to keep the talent happy."

Big budgets for research and development give vendors another advantage, says Steven John, strategic CIO at Workday, a SaaS vendor based in Pleasanton, Calif.

HOSPITALS COMPETE FOR IT TALENT

At stake: $25B in stimulus funding

HEALTHCARE PROVIDERS in the U.S. are encountering a shortage of qualified IT job candidates as they race to meet federal government deadlines for converting paper charts to electronic health records.

At stake is $25 billion in funding allocated in 2009 by the American Recovery and Reinvestment Act for spending on EHR technology and other forms of healthcare IT. Medical providers will be compensated for the cost of these systems if they meet certain implementation deadlines.

"You can imagine there's going to be a fair amount of hiring," says John Halamka, CIO at Beth Israel Deaconess Medical Center in Boston and a *Computerworld* columnist.

To manage the hospital's EHR rollout, Halamka opted to outsource the task to a firm that specializes in EHR implementation and practice transformation. The healthcare facility is also developing a private cloud, which required hiring IT professionals with backgrounds in database development, wireless networking, security and server administration.

Equally critical are employees who grasp how introducing technology into medicine changes how care is administered.

"I need an analyst who really understands how it is you can take a paper-based office environment and then move it to this new world of using electronic records, because it isn't just digitizing paper," says Halamka. "So they really have to understand how you leverage the technology and change processes in order to move doctors from what they may have been doing for 30 years to a new world."

Beyond IT skills, Halamka looks for candidates who "have a working vocabulary of healthcare" and are familiar with the industry's privacy, security and regulatory compliance needs.

Halamka has found, however, that his organization must compete with EHR vendors for staff. Candidates may find these vendors' fast growth and lucrative salaries more appealing than what a nonprofit hospital can offer, he says. But, he adds, Beth Israel's connection with Harvard University's medical school gives him an edge in the talent wars.

— FRED O'CONNOR, IDG NEWS SERVICE

"Corporate America can't go as deep [into the technology] to challenge the best people. That's all happening on the vendor side," says John, who was previously CIO at specialty chemical maker H.B. Fuller; he joined Workday when Fuller became a Workday customer.

"Workday is doing some very cool technology. We're one of the leading cloud vendors out there, so this is one of the places high on the list of places to be on the cutting edge," he says.

Nick Colisto, CIO at Hovnanian Enterprises, a home builder in Red Bank, N.J., puts it this way: "Twenty years ago, everyone wanted to work for IBM when they came out of college. As companies built larger systems, people switched off and went to work for large user companies. Now, with companies like Google, Amazon and LinkedIn, we'll see a shift of IT resources back to technology companies."

Colisto says what concerns him most are the cloud companies. "Cloud computing is expected to go from around $68 billion in 2010 to over $100 billion by 2012. So, yes, I am concerned we're going to find our infrastructure resources pilfered," he says.

Minneapolis-based Medtronic is in what CIO Mike Hedges describes as IT "maintenance mode." As a result, "we have had several people go. In some cases, people came to me [and said they had better job offers] and I could not match what they had been offered — in money or projects," he says.

Hedges notes that Minneapolis is headquarters to Cargill, 3M and Target, all of which compete for the same IT talent. "Wherever there's a lot of companies with large projects just getting ready to start, there's definitely poaching going on," he says.

"When you talk to CIOs, they'll tell you they're not poaching. They say that if people apply, they apply," Hedges says. "But I know that when one or two people left Medtronic to go to other companies, what happens is they call their friends."

In other words, when someone leaves for a better opportunity elsewhere, it's likely that you'll lose other staffers looking for the same opportunity, he says.

Where's the Leading Edge?

When IT consulting firm Taos provides consultants to corporate IT organizations looking to design cloud architectures, the client's IT employees see the writing on the wall, says Coco Brown, president and chief operations officer at the San Jose-based company.

"It may not be that their jobs are in danger, but they see that their traditional corporate IT world will be diminished in time, and they see where the exciting things are happening," she says. "It's a very competitive market right now, and one of the attractive messages we have is, 'Come work for us and we'll get you into those [cloud] environments where you'll be on the leading edge.' I see CIOs very frustrated by this."

Workday's John says he fully expects to see more IT employees within corporate IT organizations move to technology vendors — and in his book, that's not a bad thing.

"The cloud is changing things," he says. "You're already seeing operations and the non-differentiating work move to the cloud." It only follows that IT professionals focused on operations and infrastructure would also move to cloud and other technology vendor companies, he adds.

"Now, we're not just outsourcing bodies, but technologies, processes and people," he says. "The line between vendor CIO and corporate CIO will cease to exist, and IT people will move back and forth between that boundary much more frequently." ◆

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Prefab data centers have many benefits, but beware of vendor lock-in.

BY JOHN EDWARDS

WHEN JOHN CAMPBELL talks about Purdue University's soon-to-be implemented modular data center, he can hardly hide his enthusiasm.

"From a business position, on keeping costs down [and] trying to get as efficient a solution as possible, this is a very, very viable solution," says Campbell, associate vice president of academic technologies at the Indiana university.

Modular data center design relies on inexpensive building materials and efficient construction practices such as preconfiguring shipping containers with server racks and other IT equipment for easy drop-off and deployment.

Continued on page 28

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Continued from page 26

For Guardian Life Insurance, it's a matter of reducing the company's data center footprint, says CIO Frank Wander. The New York-based insurer is reducing its six data centers down to two — one it will own and one it will lease, Wander explained at the recent *Computerworld* Premier 100 IT Leaders conference. "We'll have a pod and go down tremendously in terms of space," he said. "We haven't done it yet, but that's where we're heading."

Confounding early skeptics, who often compared modular data centers to mobile homes, interest in modular data centers is now growing to the extent that some observers feel that the modular model could become the standard for virtually all future data center construction.

"I like to say that the large, monolithic data center is dead," says IDC analyst Michelle Bailey. Within five years, the modular model will become "almost the default approach" to data center construction, she predicts.

"You would probably have to have a really good reason for wanting to build a very large, overprovisioned data center," Bailey says, noting that enterprises are sometimes forced to build such facilities simply to meet local zoning requirements. Some cities and towns don't allow modular containers, requiring traditional structures instead.

The Modular Movement

Albert Lee, an analyst at Enterprise Management Associates, agrees that the modular model is on a roll. "From the overall technology trending perspective, I think this is the right way to go and [is] the next generation of the data center," he says. He points to the growing number of modular providers as proof of the approach's growing popularity.

In recent years, IBM, Dell, HP, Oracle, Microsoft and Cisco, plus a gaggle of other companies large and small, have worked hard to change the way enterprises view and create data centers. That said, it's still very early going for modular data centers. Bailey estimates that about 85 were sold last year, and she predicts that about 145 will be sold this year. Many of those customers are still in implementation mode, with only a handful of companies, primarily vendors, in full-fledged production.

The popularity of modular data centers is growing because the approach promises to help almost any enterprise, regardless of size or industry sector, add IT space in less time and at a lower cost than building or expanding a conventional operations center. And unlike a traditional data center, a modular facility can be located almost anywhere — next to an office building, on a spare piece of land, on a company parking lot or inside a warehouse — as long as there's access to energy, water and network resources. "The two big things that people consider are reducing the cost and cutting the time to deployment," Lee says.

Another advantage of modular data centers is that they allow users to start out small and expand as needed. "It starts to become more affordable for midsize companies that want more of a true data center room rather than just a small server room," Bailey says. "It's very different from having to build a traditional brick-and-mortar data center, where you're trying to figure out how much capacity you'll need for the next 20 years."

Modular offerings come in three basic styles. There's the original concept of a reconfigured shipping container (usually

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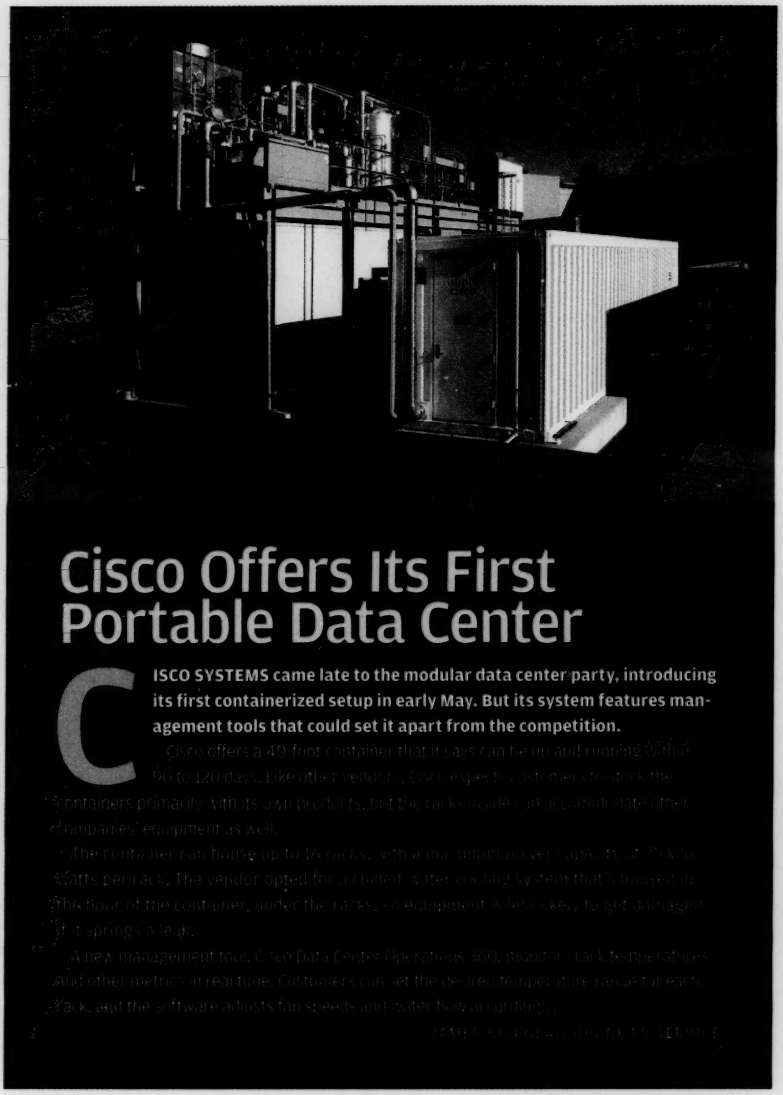


Cisco Offers Its First Portable Data Center

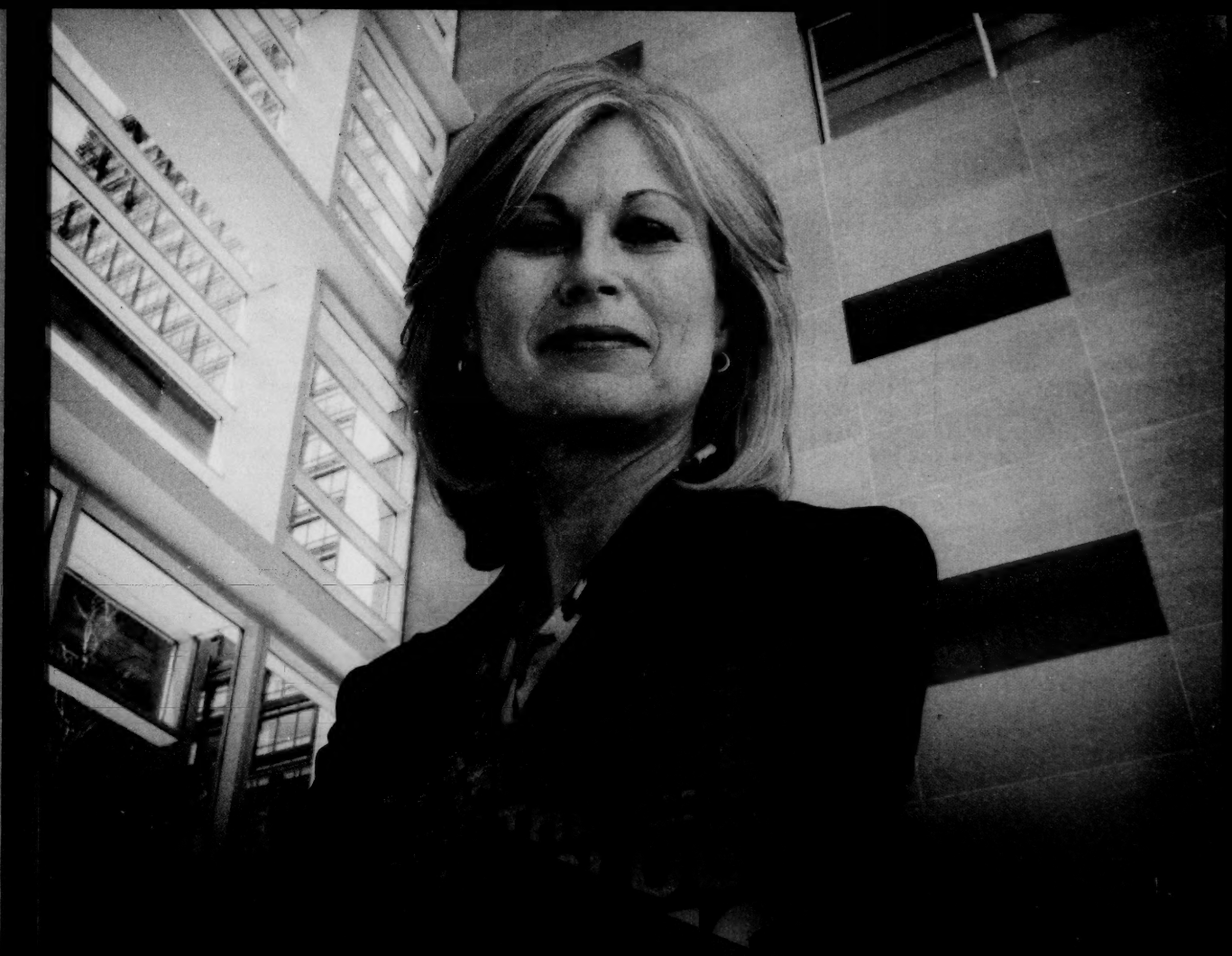
CISCO SYSTEMS came late to the modular data center party, introducing its first containerized setup in early May. But its system features management tools that could set it apart from the competition.

Cisco offers a 40-foot container that it says can be up and running within 90 to 120 days. Like other vendors, Cisco expects customers to stock the containers primarily with its own products, but the racks inside can accommodate other companies' equipment as well.

The container can house up to 16 racks, with a maximum power capacity of 76 kilowatts per rack. The vendor opted for a chilled-water cooling system that's housed on the floor of the container, under the racks, so equipment is less likely to get damaged if it springs a leak.

A new management tool, Cisco Data Center Operations 360, monitors rack temperatures and other metrics in real time. Customers can set the desired temperature range for each rack, and the software adjusts fan speeds and water flow accordingly.

JAMES KOCIATKIEWICZ FOR COMPUTERWORLD



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Continued from page 28

referred to as a "pod") that the vendor typically packs with IT gear and drops off at the customer's selected location.

Alternatively, some vendors have begun offering prefab structures that are designed to provide more flexibility in both interior space and layout configuration. "It gets either partially or completely built in a factory and shipped to your site; then the building is completed on site," Bailey explains.

> **[Pods are] extremely energy-efficient, compared to our older data center.**
>
> **JOHN CAMPBELL,** ASSOCIATE VICE PRESIDENT OF ACADEMIC TECHNOLOGIES, PURDUE UNIVERSITY

The third approach is a hybrid model that combines both modular and traditional features. Here, vendors lease quickly configurable and expandable modular spaces, located inside large office buildings or plant-style facilities.

Many modular vendors, particularly pod makers, market their offerings as all-in-one packages that include servers and related infrastructure equipment, as well as power, cooling and other resources. "It can be a convenience or a trap, depending on how you look at it," Lee says, noting that customers may find themselves gaining speed and convenience in the short term but losing IT flexibility in the future.

Purdue's Compelling Case

Campbell began exploring his modular options for Purdue after it became apparent that the university's high-performance data center was in dire need of additional power. The facility's seemingly unquenchable thirst for electricity — driven in part by three large server clusters built within the past three years — was threatening to drain its co-tenants' power resources. "It's a 10-story building; we are in the basement of that building, and we consume 85% of the power," Campbell says.

An electrical upgrade was vital, but Campbell couldn't wait for the required bureaucratic approvals. "Getting an electrical upgrade . . . is a two-to-three-year process," he says. "We just didn't have time for the process to work its way through."

Campbell realized that he needed to do something fast or the university's research projects would soon begin suffering. He and his staff examined and rejected several potential options. "We looked at other places on campus that might have space and power available, but we couldn't find any," he explains. Colocation was also considered and eventually rejected due to logistical and cost concerns.

Running out of choices, Campbell and his team turned their attention to modular offerings and saw several benefits. Pod-based structures, which could be deployed quickly on land near the main data center, could reduce the pressure on existing resources and accommodate future growth.

Most important, the modular structures wouldn't have to undergo the same approval process as a new building. "They are considered a piece of equipment, rather than a building or construction expense," Campbell says. "So we could take this off the shelf and, in two or four months, have it up and going."

Campbell ordered a pod from Hewlett-Packard with the idea that additional structures could be added as the need arose. The modular facility will be an adjunct to the main data center.

The approach also turned out to be significantly less expensive than any of the other options Campbell and his staff considered. "It was about half the cost of what we would pay for co-lo space," he says. There were other benefits, too. "It's extremely energy-efficient, compared to our older data center," he says. "It's more flexible . . . we can build and add as we need the growth."

The Purdue pod holds one research cluster, as will any new pods that are added later. One drawback is that the pods don't have a lot of space for people to work in. "There's plenty of room to work in the front, but it's tighter in the back," says Campbell. "You really want [to use pods] for something that you don't plan on accessing all the time."

Another challenge, Campbell says, was getting staffers accustomed to working in a facility located in an external structure. "The service support staff was already familiar with accessing

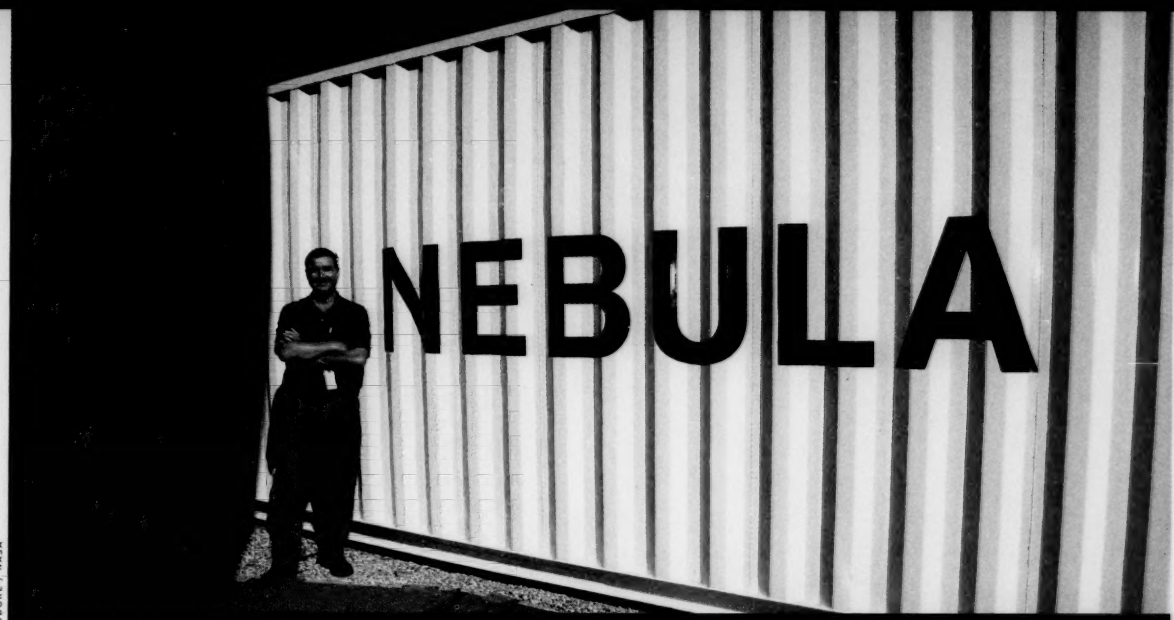
The Modular Approach

PROS

- **Deployment speed:**
- **Cost:**
- **Placement:**
- **Scalability:**

CONS

- **Durability:**
- **Service availability:**
- **Tight quarters:**
- **Vendor lock-in:**
- **Security:**



NICK THEODORE / NASA

» RAYMOND O'BRIEN is still evaluating the use of modular data centers to better manage compute-intensive NASA research projects. But he's already learned an important lesson: Pay close attention to cable management in the close confines of the containerized units.

anything and fixing anything in a remote way, but it seemed a lot easier when the data center was still down the hall," he says. "This [new data center] is down the street, and while they've been using all the remote stuff for years, it's made things a little bit different when an onsite visit is needed."

Supporting the Final Frontier?

Raymond O'Brien, chief technology officer for IT at NASA's Ames Research Center, is exploring the feasibility of modular data centers and is trying out a pod from Cirrascale, a Poway, Calif.-based provider of cloud-based systems and modular data centers. He plans to see if data center pods could help NASA better manage its voracious computing appetite.

"Growth estimates and other factors showed we could be on a course to exhaust available data center capacity at Ames Research Center and possibly some other NASA centers," he says. "We decided to acquire a containerized data center to better understand if this alternative would be a good way to address our planned growth."

NASA juggles scores of research projects, each with its own computing needs — an operating model that seems almost ideal for the use of modular facilities. Being able to quickly and easily add computing and storage resources without having to deal with space constraints in existing data centers is very appealing, O'Brien says.

While he hasn't yet reached a final conclusion on the modular option, O'Brien says NASA has already learned an important lesson: Pay attention to cable management.

"There isn't much room inside containers," O'Brien says. "The server equipment is very densely packed, so having a good cable management approach will ensure [that] your technical support team can move around inside and easily identify the cabling associated with server and network resources requiring attention or maintenance."

While modular data centers may offer a variety of potential benefits, potential users need to be aware of some gotchas. Vendor lock-in is perhaps the biggest drawback. "You're very heavily reliant upon [a single] providers to give you service," says IDC's Bailey. "So if you buy an HP container, you've really got to go to HP for the service on that."

Users considering modular systems should also remember that there are other ways to add data center capacity without building new facilities, says Forrester Research analyst Richard Fichera, noting that two such options are virtualization and cloud computing. "People keep buying all this new stuff and packing it more densely into existing data centers," he observes. "I've known data centers that five years ago were out of capacity, but they keep re-engineering inside the existing structure and they keep stretching it out."

Bailey notes that while modular facilities are meeting the needs of a growing number of enterprises, they still aren't a good match for some organizations. "If you're a company that has a fairly predictable understanding of what your growth is going to be regarding IT technology, and if you can fairly well forecast the amount of power you'll need to service that IT load, perhaps you should go with a more traditional approach to building a data center," she says.

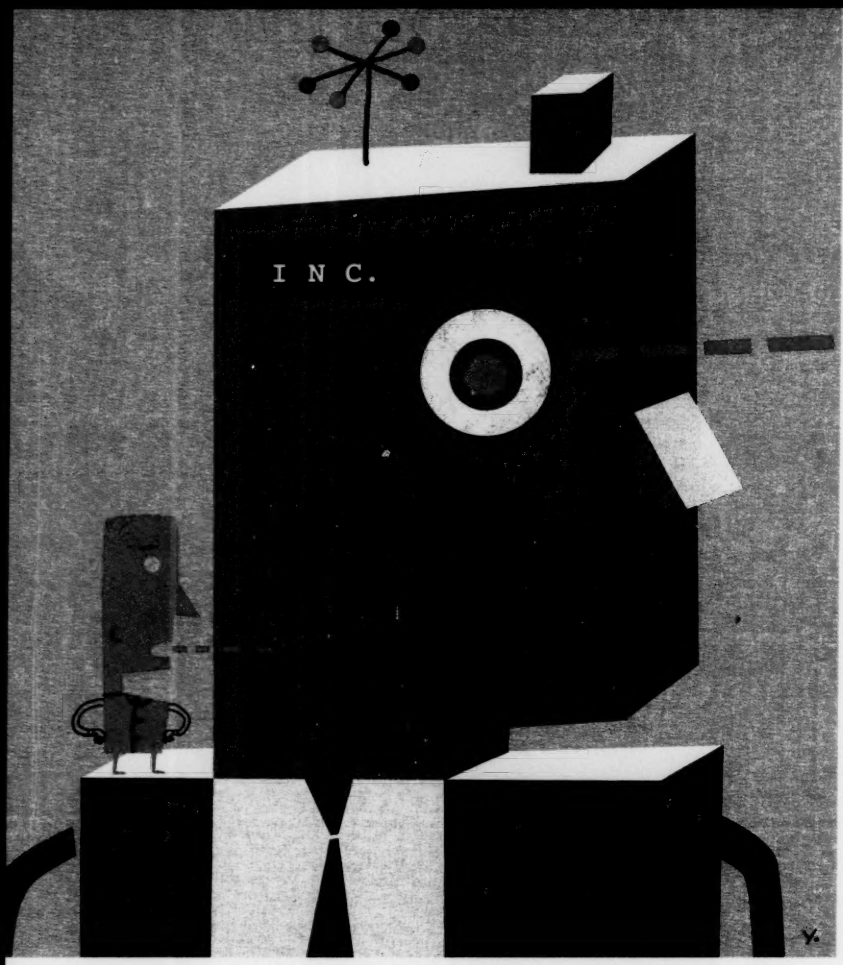
Bailey says that careful planning and smart utilization practices can allow organizations to reap long-term benefits from conventional data centers. An existing facility — already bought and paid for — may be able to accommodate more equipment, making it a better financial bet than adding a modular unit.

Paul Major, managing director of IT at Colorado ski resort operator Aspen Skiing, says prefab wasn't an option for his new data center because one of his goals was "getting all our IT people together in one place, for the first time."

Campbell says he "strongly encourages" IT managers who are considering modular data centers to visit such a facility before making a decision. "Take the time to visit," he says. "Walk into them to see how they're cabled up, and make sure it fits your environment."

O'Brien recommends keeping a close eye on the swiftly evolving modular market. "There's a lot of rapid innovation taking place," he says. "It's up to you to keep your antenna up and stay on top of all the latest developments." ◆

Edwards *is a technology writer in the Phoenix area. Contact him at jedwards@gojohnedwards.com. Additional reporting by Johanna Ambrosio.*



IT Lessons From Startups

Big IT shops can learn a lot from small companies that started with a blank slate. BY JUAN CARLOS PEREZ

SUCCESSFUL TECHNOLOGY STARTUPS are usually keen to draw attention to their hot products, not to their internal use of IT. But companies such as Groupon, Box.net, Zendesk and SlideShare can offer CIOs lessons from what they've accomplished with limited resources, a blank slate for IT infrastructure and the latest IT tools and services.

Groupon: 'Fluid' IT-business Relations

Groupon, the online coupon phenomenon founded in 2008, believes that a key to its success is the fact that its IT professionals frequently collaborate closely with business managers. "We try to create a very collaborative environment, getting engineering very embedded with the business side," says Ivan Moscoso, Groupon's director of engineering. "There are never really strong divisions between our departments. We try to keep things fairly fluid."

By having a lot of face time with managers in departments like sales, editorial and customer service, IT staffers can develop IT services and tools that truly support the efforts and goals of the company, Moscoso says.

To accomplish this, Groupon is very selective when hiring IT professionals. "To get that close collaboration between the business and engineering means selecting the right people who can be both extremely technical as well as open to working with mixed, multidisciplinary teams," Moscoso says.

Zendesk: Managing Developer Collaboration

At Zendesk, which makes Web-based help desk and IT support software, application developers participate in internal "hackathons" to help spur innovative thinking and get valuable projects under way quickly.

The company also holds "stand-up" meetings that last 15 to 20 minutes and give the application development team a chance to discuss what's new and bring up issues that need to be addressed. But for real sit-down collaboration, there are the hackathons, where developers work on projects that can be completed in 24 hours, says Zack Urlocker, Zendesk's chief operating officer.

"You don't want to necessarily do that all the time," Urlocker says. "But sometimes that's a nice way to get a bunch of small projects finished all at once and give people that sense of accomplishment."

Box.net: Going to the Cloud

The use of cloud-based applications and IT infrastructure services tends to be popular among technology startups. Relying on the cloud lets young, innovative ventures control purchasing and maintenance costs and allows them to focus on developing their unique products.

For example, thanks to its liberal and savvy use of cloud-based applications and infrastructure services, Box.net until recently was able to get by with only one person devoted exclusively to IT. Its lone IT lead, Jeff Sutton, supported 150 employees at the provider of hosted content management, collaboration and file-sharing applications.

"I'm working on things I would have never worked on before if we didn't have this cloud infrastructure," says Sutton. "I'd be doing repetitive maintenance tasks."

For example, Sutton is in charge of the company's internal application development environment, and he's leading a VMware

JAMES YANG ILLUSTRATION

project. "There are a lot more things I have bandwidth to do. It gives me more time to focus on new technologies," he says.

Aaron Levie, Box.net's CEO and co-founder, says the company looks for cloud-based applications for everything, especially for standard IT needs. "We want to free up resources to solve the higher-order issues around technology," Levie says.

This approach has also allowed Box.net to grow rapidly, sometimes doubling its head count from one year to the next, without having to worry about its IT infrastructure buckling or collapsing. "One of the breaking points when an organization grows like this is that their IT infrastructure begins to have challenges," says Levie. " We try to remove as many of those kinds of limits as possible from how quickly we can grow," says Levie.

Like Box.net, Zendesk uses a broad array of cloud applications and services. And because of that, the 70-employee company hasn't needed even one person devoted exclusively to IT. "We run most of our business off of hosted, cloud-based software," Urlocker says.

In addition to using its own cloud-based application, Zendesk uses business software from Box.net, Google, Salesforce.com, Amazon Web Services, Rackspace and Yammer.

Asked about the concerns that many IT leaders still have about the cloud, Urlocker says cloud vendors have significantly improved the security, reliability and performance of their offerings. "Things have really matured in the last few years," he says. "It's not the Wild West anymore."

CIOs may find that the reliability and security they get from commercial cloud vendors often exceeds what they get from their own IT departments, he adds.

Urlocker recommends starting with a few small projects in the cloud. "If you have an IT organization that isn't running any cloud-based software, that's really behind the curve," he adds.

SlideShare: Constant Iteration

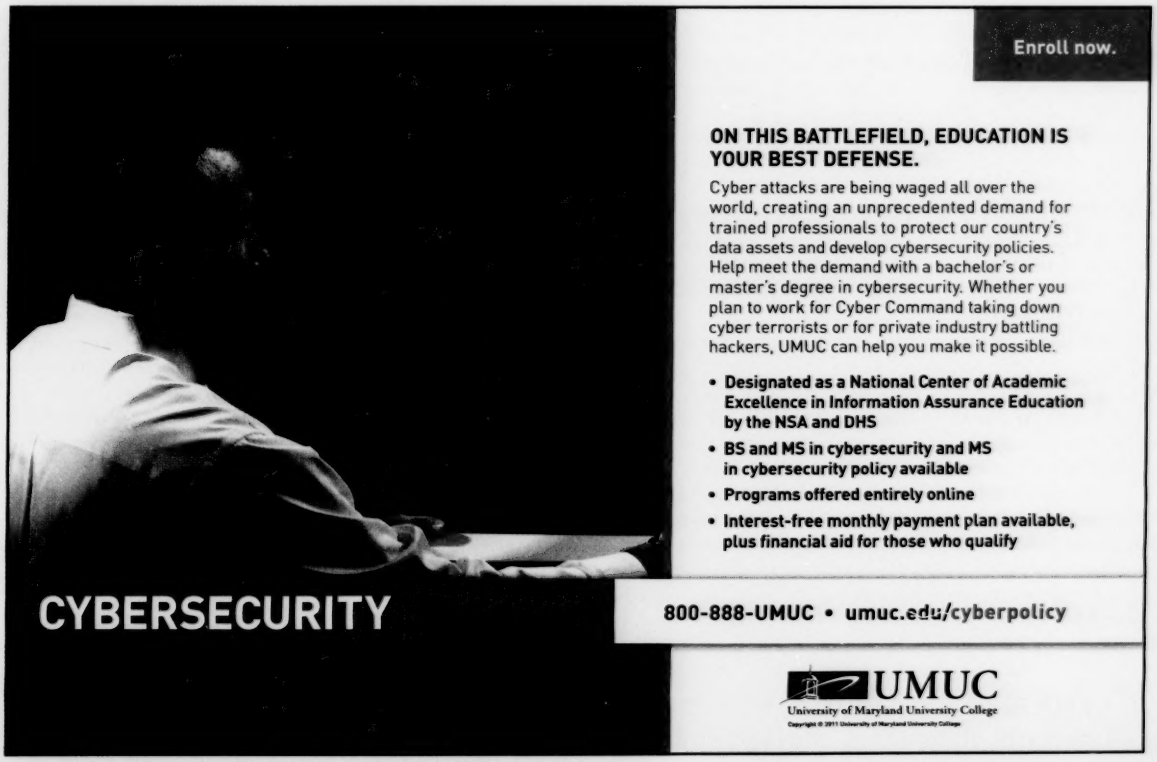
SlideShare, a site for posting and sharing business presentations, has perfected the art of constantly tweaking its software and pushing out multiple changes per day.

SlideShare's CTO and co-founder, Jonathan Boutelle, recommends an approach of constant iteration for software development, based on continuous and exhaustive analysis of user behavior. "When you chop work into small enough chunks, it becomes much less intimidating," he says.

This approach is less risky than the conventional tack of spending six months or more on a major IT project and then deploying it in a big-bang manner, he says. "We don't like big bangs," says Boutelle. "We like to constantly make small changes and feel that's a great way to reduce risk."

SlideShare is now at a point where it tweaks its Web-based application dozens of times per day, he says, adding "the combination of having very good measurement of user behavior with the ability to make small changes to the site means we can iterate extremely quickly." ◆

Perez *is a reporter for the IDG News Service.*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Security Manager's Journal

MATHIAS THURMAN

Stopping the Mobile Madness

Our manager looks into mobile device management, before employees start connecting their iPads to the network.

I LOVE MY iPAD, BUT I HATE what it represents.

My iPad is lightweight and easy to carry around, it boots up in less than a minute, its programs launch within seconds, and I can play cool games, watch movies or listen to music when I'm bored. On the downside, if I'm not mobile, I'd still rather use my desktop. Several applications that I use just don't scale on the iPad, and I like a large screen and separate keyboard.

But those drawbacks are not what I hate. Before long, Apple will probably find a way to neutralize those deficiencies, as will the other companies that are coming out with their own tablets and other midsize mobile devices.

No, what I hate is that I can connect the iPad to the Internet, synchronize my mail with my company's email servers and even link to my company's internal network.

That last one isn't exactly easy right now, but Apple and the other vendors will probably make it easier. Worse, my own CIO wants to make it easier. He wants to enable employees to access our network anywhere, anytime and from any mobile device so they can work more efficiently. That's not something that I, the security manager, embrace.

Employees currently have three ways to connect mobile devices to our network. One is to use a proxy to synchronize the delivery of mail. Second, they can connect to our wireless access points, making their devices resources on our internal network. Third, they can establish a VPN session from outside our network. Before long, they will probably have a fourth option, simpler than all the rest, assuming that mobile devices start to come with Ethernet ports. Then they'll be able to plug into any available port in the office.

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The countervailing options, of course, are things such as Network Access Control, virtual LAN segmentation and firewalls. They can be used in concert to restrict access in some form or fashion, but they aren't plug-and-play, and a deployment takes a lot of resources, plus change management. Our network isn't there yet, and the fact that we're a global company complicates matters.

This is where mobile device management comes into play.

> **Employees now have three ways to connect devices to our network. Before long, they will probably have a fourth.**

Trouble Ticket

» Employees can use iPads and other mobile devices to gain access to the corporate network.

» Find a way to enforce policies before it's too late.

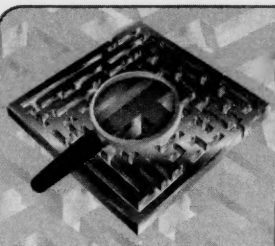
To do MDM, you need to be able to detect every device that connects to the network and set (and enforce) policies that those devices must comply with. To do this effectively, you need to monitor all of the connection methods discussed above. For example, if you want to control employees' ability to synchronize mail delivery via the ActiveSync proxy, then you have to put the MDM infrastructure in front of ActiveSync, intercepting all connections. Then, employees trying to synchronize with ActiveSync would first be forced to install the MDM client.

I have already instituted a mobile device security policy, which includes application restrictions, a device timeout, password protection, the ability to wipe the device, and an automatic wipe after six unsuccessful login attempts. Most of the leading MDM platforms allow selective wipe, meaning it's possible to wipe only corporate data while leaving personal data intact. They also offer location tracking functionality.

Unfortunately, some mobile devices won't support all of our policy features, so the policy includes an "employee responsibility" clause, requiring, for example, that departing employees remove corporate data from their devices.

As someone who has himself surrendered to the temptation to put his iPad on the corporate network, I know that other people will want to do the same. To keep ahead of them, I'll be looking into the leading MDM vendors (both the standard on-premises offerings and software as a service), and soon I hope we'll be able to deploy a proof of concept. ◆

This week's journal is written by a real security manager, ***"Mathias Thurman,"*** *whose name and employer have been disguised for obvious reasons. Contact him at mathias_thurman@yahoo.com.*



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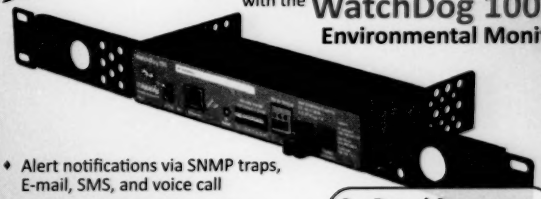

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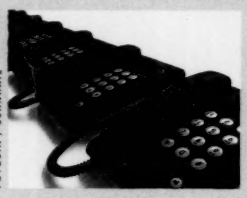
Career Watch

52% **Percentage of employers who say they are having difficulty filling key positions, according to a recent survey of over 1,300 U.S. companies conducted by ManpowerGroup.** That's up from 14% in 2010. IT staff is No. 6 on Manpower's list of the hardest jobs to fill. The most common reasons cited for the difficulty: job candidates seeking more pay than is offered, a lack of technical skills and a lack of experience.

Help Wanted On the Help Desk



FOTOLIA / SCANRAIL

CIOs need more support staffers, according to Robert Half Technology. **In a survey earlier this year of over 1,400 CIOs at U.S. companies with more than 100 employees, RHT asked respondents to provide their actual and ideal ratios of internal end users to technical support staffers.** No word on whether those CIOs have the budgets to bring their help desks closer to their ideals.

Here are the mean values of all responses:

ACTUAL RATIO

112:1

IDEAL RATIO

65:1

ASK A PREMIER 100 IT LEADER

Amy Wang

The CIO at **Henry Ford West Bloomfield Hospital** *answers questions about the hazards of having too much fun and the gender aspect of mentoring.*

I'm a fun-loving guy, and very sociable too. I'm also a hard worker, but my manager has made comments suggesting I need to take my job more seriously. How do I convince him that I do, though I don't have a serious demeanor? As far as I'm concerned, my playfulness helps me work better. When I first began working in a corporate environment about 20 years ago, an experienced HR manager repeatedly shared one piece of advice with me: Perception is everything. At first I was reluctant to accept that I had to act a certain way in order to be taken seriously, but this piece of advice has proved extremely accurate throughout my career. This doesn't mean you should pretend to be someone else in the workplace, but it does mean that if you would like to be successful at your company, you may have to temper your lightheartedness to reflect the overall dynamic of the group. It's important to understand the culture of your environment and behave according to what is expected of your role or the role that you aspire to be in. Your manager is already telling you that he or she feels you do not take the job seriously enough. Even if you are a stellar performer, how management perceives your attitude toward the job will determine your ability to progress in your career. It is OK to crack a joke to lighten a moment, but perhaps not in a serious meeting, and definitely not all the time. Start by scaling back your playfulness and watch your manager for cues as to when it may be appropriate to lighten the mood. You will find that being social can serve your career interests very well, but it must be done within a certain professional boundary.

If you have a question for one of our Premier 100 IT Leaders, send it to **askaleader@computerworld.com**, and watch for this column each month.

As a woman in IT who is interested in taking on more responsibility, I have contemplated approaching someone about being a mentor to me. A well-regarded male manager recently expressed a willingness to do this for me, but I had been thinking about asking a woman. Do you think gender is an important consideration in this decision? As a female in an executive role in IT, I understand your dilemma. Personally, I have found that anytime someone is willing to provide guidance and share knowledge as a mentor, it is important to accept the offer, regardless of gender. It can be very difficult to find the right personality match with a mentor, so if you are able to find that right fit with a male manager, then go for it. And if your organization would allow it, I suggest having more than one mentor. If you have difficulty finding a female mentor in your field, broaden your search; I have found it very valuable to look outside of my field for a strong female leader. Having someone provide guidance and advice on issues that are unique to women in male-dominated industries has helped me operate within my own organization.

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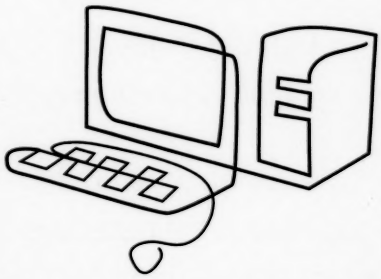

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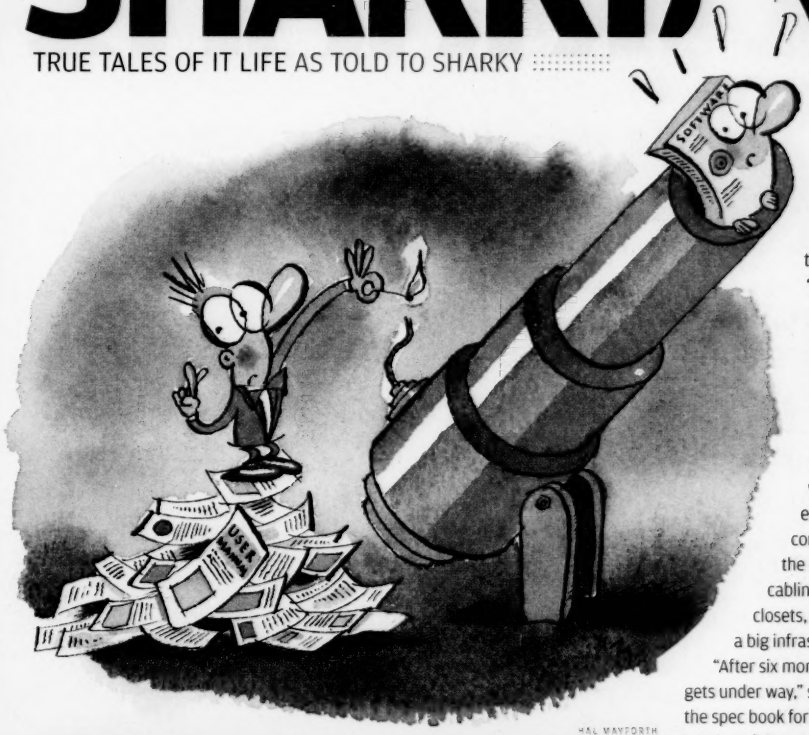

HAL MAYFORTH

Testing? QA? Manuals? Why Bother?

This pilot fish has known for a long time that he has to write the end-user documentation for new software. But it shouldn't be a problem – at least according to the project plan. "Originally, I was given two weeks at the end of the schedule to write a manual," fish says. "This was to coincide with quality assurance and testing. As sometimes happens, a problem in development caused the schedule to slip. Our manager decided the final deadline could not be moved, and he told us to skip QA and testing. I wrote the manual in two 20-hour days – and I made sure to mention who to contact with bug reports."

By the Numbers

This organization is rolling out Microsoft Outlook 2010 to its PCs, and some business groups are also interested in using Outlook 2011 for the Mac. "A status call on the rollout is going well until one of the senior managers mentions that Outlook 2011 is not performing to expectations and Microsoft needs to change it," reports a pilot fish on the scene. "When I asked about the specific issue, I was told, 'The Mac version should have the same or more features than the Windows version because it is 2011, which is higher than 2010.' I tried to explain that it's a different operating system with a different release numbering convention, but I was shut down. The manager then proceeded to mention the names of executives who would be contacted if we didn't comply. Suffice it to say, we are looking at options to attempt to meet the 'requirements.'"

Just Keeping Busy?

At this government agency, an IT pilot fish has been working with an engineering firm to completely redesign the agency's voice/data cabling, server room and closets, and equipment for a big infrastructure upgrade.

"After six months, the project gets under way," says fish. "I ask for the spec book for the voice/data portion of the project to prepare for contingencies. Turns out the plans still show all of the wiring from our design, but the spec book shows that all office space drops have been removed from the plans by the Powers That Be. When I raise the issue, I am informed that there is going to be another project in a year or so and the wiring will get done then. Only problem is that under the next project, all voice/data cabling will have to be run to a new data center room within the facility – not the closets from our project. Résumé at the ready, I am still trying to understand the why of a six-figure project that doesn't connect users to servers and is just getting yanked out in a year to do it all over again."

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OPINION

PAUL GLEN

Next Up: Real IT Workers Of New Jersey

On TV, we watch people who make and move things because so many of us don't.

FOR THE PAST FEW MONTHS, I've been immersed in thinking about how we in IT can improve our relationships with our business colleagues, and I've come to realize that we can start by watching reality television.

That statement probably makes no sense to you, but I promise that it will by the time I'm done.

I've long been amused that so many popular reality TV programs invite us to watch other people work. There are the "old crap" shows, where you watch people pick garbage, restore antiques and haggle over used stuff. There are the food shows, where you watch people cook, run restaurants and compete in contrived contests. The list goes on and on, with shows about manufacturing, mining, building, trucking, flying, fishing, tattooing and even directing traffic.

It can seem baffling that anyone would want to come home from work just to turn on the tube to watch other people work. Clearly, there's something compelling about these shows.

I think that the primary reason we watch them is to fill some void we feel in our own work lives. And the characteristics that these diverse shows share can tell us a lot about the emotional lives of the business people we work with.

First, most of these shows are about physical work of some sort, not about knowledge work. In part, that's because it's not all that interesting to watch people think. (There's a reason that coding is not a spectator sport.) But more important, many people feel deeply removed from the value they produce. They don't make anything directly. They process information, coordinate tasks or make decisions. Of course, these tasks are important, but they lack a certain primal satisfaction that comes with building things or transforming physical reality. On TV, we watch people who make and move things because so many of us don't.

The other thing these shows have in common is that they are about strong characters and their relationships. TV workplaces are populated by funny, smart, stupid, odd, charismatic, committed, lazy and offensive people. There aren't many bland or passive people on the small screen. In other words, the people on these shows are generally more interesting and entertaining than the people many of us spend our days with.

So my guess is that many of our partners on the business side have a deep yearning to feel more connected to products and people. They want to feel that their labors are part of making something interesting or important. And they want to feel bonded to and entertained by their co-workers.

We in IT have a huge opportunity to deliver some of these things to them. Even though most of our products are not physical, they still have visible aspects. We do build things, and we can do a much better job of sharing the joy of creation with our partners. And IT departments are filled with smart, interesting, strong personalities. All we have to do is open up and share ourselves as people. Instead, we hide behind process. Notice that not one of the reality TV shows focuses on process. Process isn't compelling.

So if you want to improve your relationships with your users on the business side, think about their human as well as their technical needs. You can start by watching some show about fishing. ◆

Paul Glen is the CEO of Leading Geeks, an education and consulting firm devoted to unlocking the value of technical people. You can contact him at info@leadinggeeks.com.

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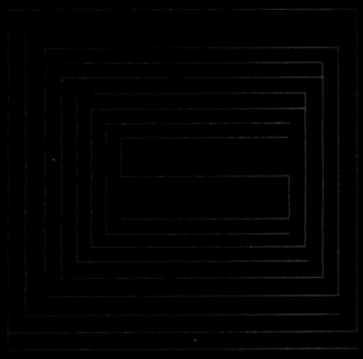

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